

Mineral Industry Surveys

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SILICON IN OCTOBER 2003

In October 2003, domestic production of silicon ferroalloys plus metal, excluding silvery pig iron, was estimated to have decreased by 15% compared with that of the previous month, according to the U.S. Geological Survey. Domestic shipments decreased by 19% while producer stocks decreased by 29% compared with those for September 2003. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

The ensuing discussion is based on a comparison of the September 2003 trade data, which are included in this report, to those of August 2003. Silicon metal imports, on a gross weight basis, decreased by 18%, owing primarily to a significant decrease in the trade category "silicon metal, 99.00% - 99.99% silicon." Ferrosilicon imports, on a gross weight basis, doubled, owing primarily to a significant increase in the trade category "ferrosilicon, 55% - 80% silicon, other." On a gross weight basis, ferrosilicon and silicon metal exports increased by 9% and 38%, respectively. Ferrosilicon exports in the trade category "ferrosilicon, more than 55% silicon" increased significantly. The increase in silicon metal imports was attributable to a significant decrease in the trade category "silicon metal, more than 99.99% silicon."

Update

In early December, the European Commission voted to impose final antidumping duties on silicon metal imports from China (49%), and from Russian producers SUAL-Kremny-Ural Ltd. (22.7%) and Bratsk Aluminum (23.6%) (Ryan's Notes, 2003a).

On December 9, the United States Court of International Trade (CIT) ruled it had jurisdiction to ask the U.S.

International Trade Administration (ITA) to recalculate antidumping duties for silicon metal imports from Brazilian producer Rima Industrial SA (Elkem Metals Co. and Globe Metallurgical Inc. v. United States, No. 02-00232, CIT Slip Opinion 2003-159). Should the CIT send the case back to the ITA, and the ITA recalculates the penalty duty, it could be above the 0.5% de minimus threshold. If that were the case, then silicon metal imports from Rima would be subject to annual administrative reviews (Ryan's Notes 2003b, p. 3). Rima was exempted from the administrative reviews in December 2002 after three consecutive annual reviews established a margin below the de minimus rate (International Trade Administration, 2002).

In mid-December it was reported that four North American silicon metal producers—Elkem Metals Company, Globe Metallurgical, Inc., Simcala, and Becancour Silicon—had formed the Silicon Metal Antifraud Alliance to monitor illicit imports of silicon to the United States that had been circumventing a U.S. antidumping duty order and evading payment of antidumping duties. The Alliance was to take action to stop the illegal entry and consumption of such imports (Ryan's Notes, 2003b, p. 3-4).

References Cited

- International Trade Administration, 2002, Silicon metal from Brazil—Final results of antidumping duty administrative review and revocation of order in part: Federal Register, v. 67, no. 242, December 17, p. 77225-77227.
Ryan's Notes, 2003a, EC affirms Russian and Chinese Si duties: Ryan's Notes, v. 9, no. 49, December 8, p. 1.
Ryan's Notes, 2003b, Sual negotiating an EC price pact—U.S. group to fight mislabeled imports: Ryan's Notes, v. 9, no. 50, December 15, p. 2-4.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
October 2	46.0-48.0	42.5-45.0	60.0-61.0
October 9	46.0-48.0	44.0-46.0	60.0-62.0
October 16	42.0-45.0	44.0-46.0	60.0-62.0
October 23	42.0-45.0	43.0-45.0	62.0-64.0
October 30	42.0-45.0	43.0-45.0	62.0-64.0

¹Source: Ryan's Notes, North American transaction price.

²Source: Platts Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2003^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, October 31
	October	Year to date ⁵	October	Year to date ⁵	
Ferrosilicon:					
All grades ^{6, 7}	13,700	163,000	9,760	134,000	18,400
Silicon metal:					
Excludes semiconductor grades	9,950	108,000	9,070	101,000	4,280

¹Data are rounded to no more than three significant digits.

²Includes U.S. Geological Survey estimates.

³Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

⁴Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

⁵Includes revisions to previous months' data.

⁶Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁷Includes miscellaneous silicon alloys.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN SEPTEMBER 2003^{1, 2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	485	291	\$376,000	3,030	1,820	\$2,460,000
Malaysia	--	--	--	27	21	45,600
Mexico	118	71	105,000	990	602	1,040,000
Total	602	361	481,000	4,050	2,440	3,540,000
Other ferrosilicon:						
Australia	--	--	--	24	12	29,300
Brazil	--	--	--	100	45	128,000
Canada	202	101	180,000	2,200	1,100	1,760,000
France	--	--	--	18	9	15,000
Germany	--	--	--	9	3	11,700
Italy	--	--	--	32	17	52,600
Korea, Republic of	76	38	64,000	588	294	615,000
Malaysia	--	--	--	20	10	22,800
Mexico	50	25	54,500	1,080	534	979,000
Spain	--	--	--	9	5	8,630
Other (3 countries)	--	--	--	9	4	15,300
Total	328	164	298,000	4,090	2,030	3,640,000
Total ferrosilicon	930	525	779,000	8,130	4,470	7,180,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN SEPTEMBER 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
China	42	XX	\$1,320,000	657	XX	\$19,000,000
France	28	XX	688,000	119	XX	2,900,000
Germany	29	XX	838,000	476	XX	15,200,000
Japan	593	XX	21,300,000	3,200	XX	137,000,000
Korea, Republic of	59	XX	2,580,000	516	XX	20,100,000
Malaysia	5	XX	844,000	57	XX	9,710,000
Norway	24	XX	676,000	556	XX	14,100,000
Taiwan	13	XX	540,000	119	XX	4,240,000
Ukraine	14	XX	367,000	67 ³	XX	1,840,000
United Kingdom	10	XX	1,420,000	158	XX	15,700,000
Other (40 countries)	54	XX	4,030,000	318	XX	20,600,000
Total	871	871 ^e	34,600,000	6,240	6,240 ^e	261,000,000
99.00% - 99.99% silicon:						
Brazil	84	83	233,000	379	375	840,000
Colombia	34	34	48,100	103	102	145,000
France	26	26	36,800	26	26	36,800
Italy	27	27	78,700	337	334	522,000
Jamaica	--	--	--	9	9	15,300
Japan	--	--	--	15	14	39,700
Mexico	120	119	179,000	226	224	345,000
Norway	166	165	343,000	506	502	827,000
Singapore	--	--	--	7	7	9,020
Venezuela	--	--	--	39	38	56,200
Other (13 countries)	(4)	(4)	3,520	42	42	96,500
Total	457	453	923,000	1,690	1,670	2,930,000
Other silicon:						
Canada	8	7	15,400	2,230	2,170	2,440,000
Germany	--	--	--	42	41	55,500
Hong Kong	43	42	57,300	127	123	243,000
Italy	--	--	--	136	132	223,000
Japan	123	120	166,000	1,100	1,070	1,620,000
Korea, Republic of	--	--	--	188	182	248,000
Mexico	143	139	311,000	346	336	1,010,000
Netherlands	131	127	402,000	624	600	2,810,000
Taiwan	--	--	--	61	60	102,000
United Kingdom	--	--	--	469	456	546,000
Other (17 countries)	42	40	60,300	182	176	324,000
Total	490	475	1,010,000	5,500	5,340	9,620,000
Total silicon metal	1,820	1,800	36,600,000	13,400	13,300	273,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN SEPTEMBER 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55% - 80% silicon, over 3% Ca:						
Argentina	20	12	\$21,600	660	329	\$635,000
Brazil	18	12	9,490	1,060	792	771,000
Canada	--	--	--	41	30	16,400
China	--	--	--	19	3	14,200
France	36	21	48,500	144	85	194,000
Germany	--	--	--	6	4	6,000
Mexico	2	1	7,390	15	10	55,400
Total	76	46	86,900	1,940	1,250	1,690,000
55% - 80% silicon, Other:						
Brazil	60	44	43,400	5,730	4,370	3,370,000
Canada	1,180	890	837,000	11,200	8,420	7,590,000
China	15,800	11,800	9,170,000	35,600	26,700	19,900,000
Iceland	--	--	--	8,160	6,120	4,870,000
Kazakhstan	6,670	5,080	4,820,000	24,300	18,600	17,200,000
Norway	572	417	725,000	9,330	6,950	8,540,000
Russia	7,110	4,910	4,200,000	21,400	15,100	12,600,000
South Africa	--	--	--	2,440	1,850	1,340,000
Ukraine	--	--	--	6,260	4,720	3,670,000
Venezuela	3,000	2,250	2,040,000	28,400	23,400 ³	19,500,000
Other (5 countries)	698	468	1,480,000	4,660	3,070	8,050,000
Total	35,100	25,800	23,300,000	157,000	119,000	107,000,000
80% - 90% silicon:						
Canada	--	--	--	38	30	16,800
South Africa	--	--	--	9	7	3,350
Total	--	--	--	47	38	20,100
Magnesium ferrosilicon:						
Argentina	240	114	175,000	2,030	928	1,410,000
Brazil	125	57	66,800	3,300	1,480	1,990,000
Canada	136	64	112,000	2,330	1,110	1,810,000
China	786	354	549,000	4,720	2,130	3,220,000
France	--	--	--	80	29	90,500
Germany	23	12	40,900	32	17	57,100
India	38	18	38,500	57	26	56,600
Japan	32	14	21,600	369	170	444,000
Netherlands	--	--	--	102	48	62,400
Norway	833	369	702,000	10,500	4,820	8,530,000
Other (South Africa)	2	1	20,000	2	1	20,000
Total	2,220	1,000	1,730,000	23,500	10,800	17,700,000
Other ferrosilicon:						
Brazil	62	25	93,300	602	271	428,000
Canada	798	279	506,000	6,160	2,060	3,800,000
China	4	2	6,220	83	37	85,000
France	10	5	19,200	34	18	75,000
Russia	390	189	165,000	1,930	1,300	1,110,000
Ukraine	5	3	3,550	11	5	7,030
Total	1,270	502	794,000	8,820	3,700	5,500,000
Total ferrosilicon	38,600	27,400	25,900,000	192,000	135,000	132,000,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN SEPTEMBER 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
Belgium	--	XX	--	12	XX	\$48,000
China	2	XX	\$34,100	37	XX	463,000
Finland	--	XX	--	9	XX	29,100
Germany	30	XX	3,250,000	236	XX	29,000,000
India	--	XX	--	14	XX	18,900
Italy	17	XX	800,000	234	XX	11,400,000
Japan	33	XX	1,060,000	375	XX	11,000,000
Korea, Republic of	--	XX	--	85	XX	600,000
Poland	--	XX	--	4	XX	17,300
Spain	--	XX	--	4	XX	22,500
Other (9 countries)	(4)	XX	7,080	12	XX	870,000
Total	82	82 ^e	5,150,000	1,020	1,020 ^e	53,500,000
99.00% - 99.99% silicon:						
Argentina	15	15	13,600	754	750	714,000
Australia	243	241	268,000	3,880	3,610 ³	4,130,000
Brazil	5,720	5,680	6,870,000	41,100	40,800	48,500,000
Canada	1,240	1,230	1,470,000	12,000	11,900	14,200,000
China	--	--	--	269	263	240,000
Kazakhstan	--	--	--	520	515	517,000
Korea, Republic of	--	--	--	120	119	96,000
Malaysia	--	--	--	300	297	309,000
Norway	1	1	6,430	4,650	4,510	8,220,000
South Africa	--	--	--	21,400	21,200	24,400,000
Other (9 countries)	630	626	1,080,000	893	862	1,640,000
Total	7,860	7,800	9,710,000	85,900	84,900	103,000,000
Other silicon:						
Brazil	--	--	--	1,390	1,370	1,410,000
Canada	290	204	368,000	2,280	2,150	2,400,000
China	--	--	--	2,440	2,400	2,160,000
Germany	40	39	38,300	243	238	233,000
Kazakhstan	--	--	--	240	233	190,000
Norway	--	--	--	1,100	1,080	1,110,000
South Africa	21	20	19,800	6,240	6,130	5,990,000
Ukraine	--	--	--	680	669	638,000
United Arab Emirates	--	--	--	319	314	264,000
United Kingdom	--	--	--	561	546	595,000
Other (10 countries)	16	1	24,600	646	485	715,000
Total	366	264	451,000	16,100	15,600	15,700,000
Total silicon metal	8,300	8,140	15,300,000	103,000	102,000	172,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.